

AMENDMENTS TO THE CLAIMS

1. (Original) A transformer comprising:

an iron core structure;

a first bobbin comprising a first hollow portion and a second hollow portion, wherein the iron core structure passes through and surrounds the first and second hollow portions;

a first primary coil wound on the first hollow portion;

a first secondary coil wound on the second hollow portion;

a second bobbin comprising a third hollow portion and a fourth hollow portion, wherein the iron core structure passes through and surrounds the third and fourth hollow portions;

a second primary coil wound on the third hollow portion; and

a second secondary coil wound on the fourth hollow portion.

2. (Original) The transformer as claimed in claim 1, wherein the first bobbin is disposed substantially parallel to the second bobbin.

3. (Currently Amended) The transformer as claimed in claim 1, wherein the density of the windings on the second and fourth hollow portions exceeds ~~that~~ the density of the windings on the first and third hollow portions.

4. (Original) The transformer as claimed in claim 1, wherein the iron core structure comprises a first core portion, a second core portion and a third core portion, the first core portion passes through the first bobbin, the second core portion passes through the second bobbin, and the third core portion surrounds the first and second bobbins.

5. (Original) The transformer as claimed in claim 1, wherein the first bobbin further comprises a first protrusion to separate the first and second hollow portions, and the second bobbin further comprises a second protrusion to separate the third and fourth hollow portions.

6. (Original) The transformer as claimed in claim 1, further comprising an insulating cover disposed on the first and second bobbins.

7. (Currently Amended) The transformer as claimed in claim 1 6, wherein the insulating cover comprises a separating plate to separate the first and second bobbins.

8. (Original) The transformer as claimed in claim 1, wherein the first bobbin further comprises a first engaging portion and the second bobbin further comprises a second engaging portion, and the

first engaging portion engages the second engaging portion to connect the first bobbin with the second bobbin.

9. (Original) The transformer as claimed in claim 8, wherein the first engaging portion comprises a protruding portion and the second engaging portion comprises a matching recessed portion, and the protruding portion and the matching recessed portion match up to each other.

10. (Original) The transformer as claimed in claim 8, wherein the first engaging portion comprises a matching recessed portion and the second engaging portion comprises a protruding portion, and the protruding portion and the matching recessed portion match up to each other.

11. (Original) A transformer comprising:  
a plurality of bobbins disposed parallel to each other;  
a plurality of primary coils wound on one end of each bobbin;  
a plurality of secondary coils wound on the other end of each bobbin; and  
an iron core structure passing through and surrounding each bobbin.